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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/934,817 | 08/21/2001 | Christian Wagner | (Z) 98003 P US | 9363 |

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EXAMINER

LEROUX, ETIENNE PIERRE

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2858

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DATE MAILED: 01/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/934,817

Applicant(s)
Wagner et al

Examiner
Etienne LeRoux

Art Unit
2858



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 21, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 20) ☐ Other:

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Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-44 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites “wherein said optical element is acted on by said radiation such that a heat supply results from said radiation that lacks symmetry corresponding to the shape of said optical element.” It is difficult to understand how the shape of the optical element can determine the pattern of the radiation from the light source.

Claims 2-44 lack enablement for reasons similar to the above.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "and a connecting structure between said optical element and said mount, having a symmetry characteristic that does not correspond to the shape of the optical element." It is unclear how the symmetry characteristic of the heat supply can be different from the symmetry of the optical element. Examiner maintains that applicants's disclosure, in particular Figures 1, 2, 3a, 3b, 3c, 6, 5a, 7 and 8, shows at least one axis of symmetry of the optical element with the heat supply.

Claim 26 is indefinite as it includes a "type" of illumination.

Claims 2-25 and 27-44 are indefinite for reasons similar to the above.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-16, 21-24 and 36-44 are rejected under 35 U.S.C. 102(b) as being anticipated by USPAT 5,574,474 to McCrary, as best examiner is able to ascertain.

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Regarding claims 1-4, 36, 37, 43 and 44, McCrary discloses: a light source that emits radiation [col 5, lines 45-46], a mount [Fig 1, 17], an optical element fastened in said mount [Fig 1, 10a], wherein said optical element is acted on by said radiation such that a heat supply results from said radiation that lacks symmetry corresponding to the shape of said optical element [col 6, lines 37-48], and a connecting structure [Fig 1, 11-15] between said optical element and said mount, having a symmetry characteristic that does not correspond to the shape of the optical element [Fig 1].

Regarding claim 5, McCrary discloses a transmitting element [Fig 1].

Regarding claim 6, McCrary discloses a lens [Fig 1]

Regarding claim 7, McCrary discloses a transmitting element [Fig 1].

Regarding claim 8, McCrary discloses a lens [Fig 1]

Regarding claim 9, McCrary discloses a transmitting element [Fig 1]

Regarding claim 10, McCrary discloses a lens [Fig 1]

Regarding claim 11, McCrary discloses a transmitting element [Fig 1]

Regarding claim 12, McCrary discloses a lens [Fig 1]

Regarding claim 13, McCrary discloses a mirror [Fig 3, 35]

Regarding claim 14, McCrary discloses a mirror [Fig 3, 35]

Regarding claim 15, McCrary discloses a mirror [Fig 3, 35]

Regarding claim 16, McCrary discloses a mirror [Fig 3, 35]

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Regarding claim 21, McCrary discloses the optical element is arranged near a field plane
[Fig 1]

Regarding claim 22, McCrary discloses the optical element is arranged near a field plane
[Fig 1]

Regarding claim 23, McCrary discloses the optical element is arranged near a field plane
[Fig 1]

Regarding claim 24, McCrary discloses the optical element is arranged near a field plane
[Fig 1]

Regarding claim 36, McCrary discloses wherein said passive thermally conducting element comprises an assembly of portions of different material [col 3, lines 22-28].

Regarding claim 38, McCrary discloses a plurality of different materials [Abstract].

Regarding claim 39, McCrary discloses in which said connecting structure comprises adjustable portions [col 3, lines 22-28]

Regarding claims 40-42, McCrary discloses the thermally conducting element is adjustable
[col 4, lines 10-65]

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 17-20 and 25-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCrary and further in view of USPAT 6,038,013 to Ohsaki, as best examiner is able to ascertain.

Regarding claims 17, McCrary discloses the essential elements of the claimed invention except for a slit-shaped image field. Ohsaki discloses a slit-shaped image field [Fig 4]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McCrary to include a slit-shaped image field as taught by Ohsaki for the purpose of limiting the size of the image in order to minimize distortion at the edges of the lenses.

Regarding claim 18, Ohsaki discloses a slit-shaped image field [Fig 4]

Regarding claim 19, Ohsaki discloses a slit-shaped image field [Fig 4]

Regarding claim 20, Ohsaki discloses a slit-shaped image field [Fig 4]

Regarding claim 25, Ohsaki discloses the illumination lacks rotational symmetry [Fig 4]

Regarding claim 26, Ohsaki discloses the illumination consists of off-axis dipole or quadrupole illumination type [Fig 4]

Regarding claim 27, Ohsaki discloses the illumination lacks rotational symmetry [Fig 4]

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Regarding claim 28, Ohsaki discloses the illumination consists of off-axis dipole or quadrupole illumination type [Fig 4]

Regarding claim 29, Ohsaki discloses the illumination lacks rotational symmetry [Fig 4]

Regarding claim 30, Ohsaki discloses the illumination consists of off-axis dipole or quadrupole illumination type [Fig 4]

Regarding claim 31, McCrary discloses an optical element near a pupil plane [Fig 1]

Regarding claim 32, Ohsaki discloses the illumination lacks rotational symmetry [Fig 4]

Regarding claim 33, Ohsaki discloses the illumination consists of off-axis dipole or quadrupole illumination type [Fig 4]

Regarding claim 34, McCrary discloses an optical element near a pupil plane [Fig 1]

Regarding claim 35, McCrary discloses the connecting structure comprises different materials [Fig 1]

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne (Steve) LeRoux whose telephone number is (703) 305-0620.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached at (703) 308-1436.

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Any inquiry of a general nature relating to the status of this application or processing procedure should be directed to the receptionist whose telephone number is (703) 308-0956.

Etienne LeRoux

January 7, 2002



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